## II. AMENDMENT TO THE CLAIMS

## Amendment to the Claims

- [C1] (Previously presented) A neural implant comprising a device coated with a carbon nanofiber material.
- [C2] (Previously presented) A neural implant comprising a device, wherein at least one component of the device is made of a carbon nanofiber material.
- [C3] (Currently amended) The neural implant of claim 23, wherein the carbon nanofibers are about 2 to 200 nm in width.
- [C4] (Currently amended) The neural implant of claim <u>3</u>4, wherein the carbon nanofibers comprise carbon nanotubes.
- [C5] (Currently amended) The neural implant of claim 4 5, wherein the carbon nanotubes are functionalized.
- [C6] (Previously presented) The neural implant of claim 5, wherein the carbon nanotubes are aligned.
- [C7] (Currently amended) The neural implant of claim  $\underline{2}$  1, wherein the implant is a neural probe.
- [C8] (Previously presented) The neural implant of claim 2, wherein the nanomaterial comprises a matrix selected from the group consisting of polyurethane, polymethacrylate, polyester, polyvinyl and any copolymers thereof.
- [C9] (Previously presented) The neural implant of claim 2, wherein the implant is a neural probe.

[C10]	(Previously presented) A neural prostheses comprising an implantable
	device with a composite polyurethane carbon nanotube, the device capable of
	stimulating neuronal growth and minimizing glial scar tissue formation.

- [C11] (Currently amended) The neural prostheses of claim 10 11, wherein the carbon nanotube comprises 2% to 100% of the composite.
- [C12] (Currently amended) The neural prostheses of claim 10 11, wherein the carbon nanotube forms a carbon nanofiber.
- [C13] (Currently amended) The neural prostheses of claim 10 13, wherein the carbon nanofiber is about 100 nm.
- [C14] (Previously presented) Use of a neural implant that minimizes scar formation comprising:
  - (a) obtaining a neural implantable device;
  - (b) coating the implantable device with a nanomaterial; and
  - (c) securing the implantable device in the neural tissue.
- [C15] (Previously presented) Use of a neural implant that minimizes scar formation comprising:
  - (a) obtaining a neural implantable device comprising a nanomaterial; and
  - (b) securing the implantable device in the neural tissue.
- [C16] (Previously presented) A method of stimulating neuronal growth and minimizing scar formation by an implant in a brain, the method comprising:
  - (a) obtaining a neural implantable device comprising a nanomaterial;
  - (b) securing the implantable device in the brain; and
  - (c) providing neuronal stimulants through the device.

- [C17] (Previously presented) An orthopedic prostheses comprising an implantable device coated with a composite polyurethane carbon nanotube, the device capable of stimulating osteoblast proliferation and minimizing fibroblast encapsulation.
- [C18] (Previously presented) A method of stimulating osteoblast proliferation and minimizing fibroblast encapsulation by an orthopedic implant, the method comprising:
  - (a) obtaining an orthopedic implantable device comprising a carbon nanofiber material; and
  - (b) securing the implantable device.
- [C19] (Previously presented) A method of selecting a nanomaterial suitable for implant, the method comprising:
  - (a) determining structural dimensions of a biological molecule in a biological tissue; and
  - (b) fabricating the nanomaterial whose surface structural dimension is similar to the biological molecule.
- [C20] (Previously presented) A method of claim 19 20, wherein the nanomaterial comprises carbon nanofibers of about 2-200 nm in width.

(Previously presented) A method of claim 20, wherein the biological molecule is laminin.